

ELECTRONIC APPARATUS

ABSTRACT

The electronic apparatus comprises a display portion and a quartz crystal oscillator at least, and said electronic apparatus comprises at least one quartz crystal oscillator. Also, the at least one oscillator comprises a quartz crystal oscillating circuit comprising an amplification circuit and a feedback circuit. The feedback circuit is constructed by a flexural mode, quartz crystal tuning fork resonator or a length-extensional mode quartz crystal resonator and for example, the quartz crystal tuning fork resonator comprising tuning fork tines and tuning fork base that are formed integrally, is shown with novel shape and electrode construction. Also, the quartz crystal tuning fork resonator, capable of vibrating in a fundamental mode and having a high frequency stability can be provided with a small series resistance and a high quality factor, even when the tuning fork resonator is miniaturized. In addition, from a relationship of an amplification rate and a feedback rate, an output signal of the quartz crystal oscillating circuit having an oscillation frequency of the fundamental mode vibration for the quartz crystal tuning fork resonator can be provided with the high frequency stability.